

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An optical component comprises comprising:
a first birefringent layer; connected to
a second birefringent layer; and by
5 a shaped interface structure arranged between and connecting the first and second birefringent layers,
wherein an optical axis passing passes through the first layer and the second layer,
wherein at least the second birefringent layer having
10 includes molecules movable between a first orientation and a second orientation relative to the optical axis, the refractive index of the second birefringent layer being dependent upon the orientation of the molecules,
and wherein the first birefringent layer has an ordinary axis substantially perpendicular to the optical axis and an extraordinary axis substantially perpendicular to the optical axis.
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2. (Currently Amended) An optical component as claimed in claim 1, wherein said interface is a curved interface.

3. (Cancelled).

4. (Currently Amended) An The optical component as claimed in claim 1, wherein at least one of the first layer and the second layer comprises a liquid crystal.
5. (Currently Amended) An The optical component as claimed in claim 1, wherein the second layer comprises a liquid crystal in the nematic phase.
6. (Currently Amended) An The optical component as claimed in claim 1, wherein in the first orientation, the angle of the molecules relative of the second layer in a plane perpendicular to the optical axis changes as a function of distance along the 5 optical axis.
7. (Currently Amended) An The optical component as claimed in claim 1, wherein the second layer comprises a liquid crystal, with the first orientation corresponding to the liquid crystal being in the twisted nematic phase.
8. (Currently Amended) An The optical component as claimed in claim 1, wherein the second orientation corresponds to the second layer having the extraordinary axis parallel to the optical axis.
9. (Currently Amended) An The optical component as claimed in claim 1, wherein said optical component further comprising comprises:

5 | _____ actuation means, arranged to change for changing the
orientation of the molecules in the second layer.

10. (Currently Amended) An optical component as claimed in
claim 9, wherein said actuation means comprises at least two
electrodes arranged to apply an electric field to the second layer.

11. (Currently Amended) An optical scanning device for scanning
an information layer of an optical record carrier, the device
comprising a radiation source for generating a radiation beam and
an objective system for converging the radiation beam on the

5 | information layer, wherein the optical scanning device comprises an
optical component, the optical component comprising:

_____ a first birefringent layer; connected to

_____ a second birefringent layer; by and

_____ a shaped interface structure arranged between and
connecting the first and second birefringent layers,

10 | _____ wherein an optical axis passing passes through the first
and the second layer,

15 | _____ wherein at least the second birefringent layer having
includes molecules movable between a first orientation and a second
orientation relative to the optical axis, the refractive index of
the second birefringent layer being dependent upon the orientation
of the modules.

20 and wherein the first birefringent layer has an ordinary axis substantially perpendicular to the optical axis and an extraordinary axis substantially perpendicular to the optical axis.

12. (Currently Amended) A The optical scanning device as claimed in claim 11, wherein the optical component forms a controllable lens within the objective system.

13. (Currently Amended) A method of manufacturing an optical component comprising a first birefringent layer and a second birefringent layer, the method comprising:

5 providing a first birefringent layer with a shaped surface;

providing a second birefringent layer adjacent to the shaped surface of the first birefringent layer; and

10 inserting a shaped interface structure between the first and second birefringent layers thereby connecting the first and second birefringent layers,

wherein the molecules of the second birefringent layer are arranged to be movable between a first orientation and a second orientation relative to an optical axis passing through the first birefringent layer and the second birefringent layer.

15 and wherein the first birefringent layer has an ordinary axis substantially perpendicular to the optical axis and an extraordinary axis substantially perpendicular to the optical axis.

14. (Currently Amended) A-The method as claimed in claim 13, wherein the second birefringent layer is provided by capillary cell filling.

15. (Currently Amended) A method of manufacturing an optical scanning device for scanning an information layer of an optical record carrier, the method comprising:

providing a radiation source for generating a radiation
5 beam;

providing an objective system for converging the radiation beam on the information layer; and

providing an optical component, the optical component comprising a first birefringent layer, ~~connected to~~ a second birefringent layer, ~~by~~ a shaped interface structure arranged between and connecting the first and second birefringent layers, wherein an optical axis passing ~~passes~~ through the first and the second layer,

wherein at least the second birefringent layer having includes molecules movable between a first orientation and a second orientation relative to the optical axis, the refractive index of the second birefringent layer being dependent upon the orientation of the modules,

and wherein the first birefringent layer has an ordinary axis substantially perpendicular to the optical axis and an extraordinary axis substantially perpendicular to the optical axis.